

October 21, 1985

Re. Radium Sources Stored in a 1-1/2' D x 1-1/2' L Steel Cylinder

On Friday, October 18 we opened the steel cylinder and found that a lead cylinder surrounded by sand was inside. When the top of the lead cylinder was removed (the cylinder was approximately 2" thick) we found it contained a small paper envelope which we assumed was the radium that was removed from the safe in Building 94. It also contained what looked like a pipe nipple. The nipple appeared to be more radioactive. At this point we discontinued our investigation and called Adam Malik of Linde Tonawanda who is our interim Radioactive Officer. He suggested we measure the radiation from different distances from the sources which he could then compare to a known source in order to determine the quantity of radioactive material we have.

The envelope was removed first using a set of tongs to avoid getting too close to the source and was placed on a piece of paper on the floor where the following measurements were made with the Thyac III Victoreen Gieger Counter, Model No 489-35, Serial No 3407.

| <u>Distance from Source</u> | <u>Reading</u> |
|-----------------------------|--------------------|
| 1 meter | 0.2 millirems/hour |
| 50 centimeters | 0.4 millirems/hour |
| 10 centimeters | 3.5 millirems/hour |

The pipe source was removed and was found to have writing on the outside which identified it as an alphasource gauge. The radioactivity was measured to be as follows:

| <u>Distance from Source</u> | <u>Reading</u> |
|-----------------------------|---------------------|
| 1 meter | 0.4 millirems/hour |
| 50 centimeters | 1.7 millirems/hour |
| 10 centimeters | 50.0 millirems/hour |

The reading on the gauge was read from a distance with a cathetometer. Part of the label was missing but the following information was still visible:

National Research Corporation, Alphasource Gauge, 0.05 r-8/hrs at 1 foot
Use and store in a well ventilated room. This gauge contains less than 500 micrograms of radium. Read instructions carefully. Gamma radiation not over 0.05 r-8/hrs at 1 foot (Patents - ? - Serial No 2497213).

D. J. Hansen

UCCNHT0001874

Umetco Minerals Corporation



PO BOX 579 4625 ROYAL AVENUE • NIAGARA FALLS NEW YORK 14302

July 22, 1985

Dr Andrew E Awai
Senior Radiophysicist
State of New York
Department of Labor
Two World Trade Center
New York, NY 10047

Subject: Radioactive Licenses No ~~210-0090~~ and 950-0139

Dear Dr Awai:

In my phone conversation with you on June 26, 1985 I informed you that our Radiation Safety Officer, Mr. R J Klotzbach, had a severe heart attack and will not be returning to work. I also mentioned that Umetco Minerals Corporation no longer supports a Technology Department and that I was anxious to cancel our two licenses (210-0090 and 950-0139). The purpose of this letter is to ask your advice on how best to proceed and to let you know the preliminary steps I have taken

At your suggestion, I contacted Adam H. Malik, Radiation Safety Officer, Linde Division, Union Carbide Corporation, Tonawanda, New York on July 2, 1985 and he agreed to serve as our interim Radiation Safety Officer. A copy of this letter will serve to formalize that request.

I have contacted our plant in Hot Springs, Arkansas, which currently uses portable isotope analyzers, and they are anxious to accept ours along with the various sources as well as the Ce-137 source used as a bin level indicator in Building 169. Would you please advise what is necessary before I can ship these items and cancel License 210-0090

I would also like to proceed with canceling License No 950-0139 Mr Klotzbach was in contact with Mr. Robert Kelly, Department of Labor, Buffalo, New York and was keeping him informed of our steps to remove contaminated soil from the premises. On July 15, I phoned Mr Kelly and promised to send him the results of our analysis. I will do this within the next few days. Would you kindly advise if there are other steps that should be taken.

Very truly yours,

D J Hansen
Assistant Director of Technology

/mau/235h

cc: Messrs. Andrew Malik
Robert Kelly

Blind Copies
Messrs
R L Beethe
T J Kagetsu
D G Millenbruch
G P Parker
C G Richardson

UCCNHT0001875